FLORENCE COPPER

FLORENCE COPPER INC.
1575 W. Hunt Highway, Florence, Arizona 85132 USA
florencecopper.com

July 30, 2019

ADEQ Water Quality Compliance Section
Mail Code 5415B-1
1110 West Washington Street
Phoenix, Arizona 85007

Attention: Mr. Tracy Bunch

Subject: One-time Discharge Monitoring Results
Florence Copper, Production Test Facility
Aquifer Protection Permit No. 106360, LTF 61845

Dear Mr. Bunch:

Florence Copper is submitting one-time discharge monitoring results for the Process Solution Impoundment (PSI), Stormwater Pond, Raffinate, and Pregnant Leachate Solution (PLS) in accordance with Sections 2.5.1 and Section 3.0 of the Production Test Facility Temporary Aquifer Protection Permit (APP) No. 106360.

Sampling for parameters listed in Section 4.1 Table 4.1-2C was conducted on May 28, 2019 with Turner Labs performing the bulk of the analyses. Diesel Range Organic (DRO) analyses were conducted by Test America, Phoenix. Radiochemical analyses were completed by Radiation Safety Engineering, Chandler, Arizona. Results for the four discharge samples are listed on the following page.

Please contact me at 520-374-3984 if you require any additional information.

Sincerely,
Florence Copper Inc.

Dan Johnson
Vice President – General Manager

Attachments:
Table 1.

cc: Marybeth Greenslade, ADEQ
Nancy Rumrill, United States Environmental Protection Agency

Taseko

Table 1. One-time Discharge Monitoring: Impoundments, PLS, Raffinate

Date: 5/28/2019 (unless noted)	Units	Raffinate	PLS	Process Solution Impoundment	Stormwater Pond
Analyte	mg/L	Result	Result	Result	Result
Aluminum	mg/L	56	100	ND	ND
Antimony	mg/L	ND	ND	ND	ND
Arsenic	mg/L	ND	ND	ND	ND
Barium	mg/L	0.064	ND	0.09	ND
Beryllium	mg/L	0.032	0.047	ND	ND
Cadmium	mg/L	0.062	0.098	0.0063	ND
Calcium	mg/L	530	500	660	100
Chromium	mg/L	0.031	0.041	ND	ND
Cobalt	mg/L	0.45	0.74	ND	ND
Copper	mg/L	83	470	0.098	0.049
Iron	mg/L	22	40	ND	ND
Lead	mg/L	0.078	0.23	ND	ND
Magnesium	mg/L	230	300	140	34
Manganese	mg/L	3.8	7	0.86	ND
Nickel	mg/L	0.21	0.37	ND	ND
Potassium	mg/L	25	36	18	12
Selenium	mg/L	0.084	0.064	ND	ND
Sodium	mg/L	290	300	300	270
Thallium	mg/L	ND	ND	ND	ND
Zinc	mg/L	0.44	1.2	ND	ND
Mercury	mg/L	0.0012	ND	ND	ND
Chloride	mg/L	270	310	370	440
Fluoride	mg/L	26[a]	24	4	0.74
Nitrogen, Nitrate (As N)	mg/L	5.1	6.5	3.7	4.2
Sulfate	mg/L	14000	4900	2600	180
Alkalinity, Bicarbonate (As CaCO3)	mg/L	*Note 1*	*Note 1*	22	230
Alkalinity, Carbonate (As CaCO3)	mg/L	*Note 1*	*Note 1*	ND	ND
Alkalinity, (CaCO3) Total (As CaCO3)	mg/L	*Note 1*	*Note 1*	22	230
Conductivity	µmhos/	46985	6915	4318	2084
Total Dissolved Solids (Residue, Filte	mg/L	*5300*[a]	*8300*[a]	*Note 2*	*Note 2*
pH (pH Units)		1.05	2.56	7.15	8.16
Nitrogen, Ammonia (As N)	mg/L	ND	ND	ND	ND
Benzene	µg/L	ND	ND	ND	ND
Ethylbenzene	µg/L	ND	ND	ND	ND
Toluene	µg/L	ND	ND	ND	ND
Xylenes, Total	µg/L	ND	ND	ND	ND
DRO	mg/L	ND	ND	0.10	0.18
Gross Alpha	pCi/L	646.5±42.6	1160.3±60.6	44.7±2.2	16.8±1.3
Adj Gross Alpha	pCi/L	15.1±47.2	64.0±67.9	6.3±4.7	2.1±1.8
Radium 226	pCi/L	8.9±0.4	12.9±0.5	6.0±0.3	1.6±0.2
Radium 228	pCi/L	8.9±0.6	14.7±0.8	5.5±0.5	0.9±0.3
Total Radium	pCi/L	17.8±0.9	27.6±0.9	11.5±0.6	2.5±0.4
^{238}U	µg/L	833.3±28.5	1498.1±43.2	50.7±5.9	20.7±1.9
^{235}U	µg/L	6.093±0.032	10.955±0.048	0.371±0.007	0.152±0.002
^{234}U	µg/L	0.05117±0.00171	0.09150±0.00258	0.00331±0.00036	0.00119±0.00011
Total U	µg/L	839.4±28.6	1509.2±43.2	51.1±5.9	20.9±1.9

[a] Sample from 06/19/19

Note 1: Per Lab - *"Alkalinity analysis was not reported due to matrix interference and the pH being to low to titrate."*

Note 2: Lab missed the following requested Parameters: TDS on ponds. Re-sampling for TDS in July.